



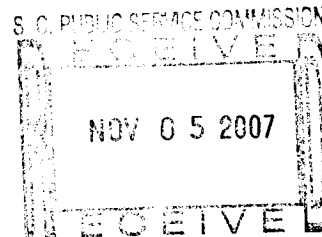
HARBOR ISLAND UTILITIES, INC.

189289
Post Office Box 1028
Beaufort, S.C. 29901-1028

(843) 982-0405 fax: 982-0707

November 1, 2007

Mr. Charles Terreni
Chief Clerk
Public Service Commission of South Carolina
P.O. Drawer 11649
Columbia, SC 29211



Re: Harbor Island Utilities, Inc. Rate Case Docket No. 2007-243-W/S

Dear Mr. Terreni:

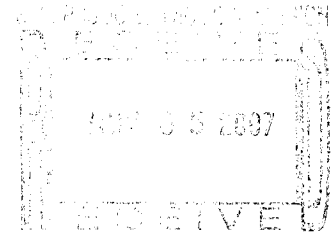
Please find enclosed ten (10) copies of the Water Loss and Audit report prepared by our contract operator, The Beaufort Group, LLC. The Public Service Commission required this report when it approved our last rate increase in 2002.

Sincerely,

Robert G. Gross
President

Copy

Mr. Dukes Scott, Office of Regulatory Staff (with 3 copies of report)



HARBOR ISLAND UTILITIES, INC.
Water Loss and Audit

THE BEAUFORT GROUP, LLC
LADY'S ISLAND, SOUTH CAROLINA
October 2007

WATER AUDIT and WATER LOSS

The Beaufort Group, LLC (BG) is the contractor for operations, maintenance, monitoring and reporting (OM&M) for Harbor Island Utilities, Inc. (HIU).

BG monitors HIU's water purchases and water sales every month. The difference in the two numbers is the amount of water not accounted for in sales.

BG and HIU are keenly aware that discrepancies exist and are on constant alert to find the sources of those discrepancies. That awareness has led to substantial reduction in the monthly water loss. However, it is an ongoing process with new sources constantly arising.

There is one master meter that measures the water HIU purchases from the Beaufort-Jasper Water & Sewer Authority (BJWSA). That meter is calibrated annually by BJWSA. HIU has only one method of determining how much water is sold and that is by reading each residential or commercial meter. That meter reading occurs every month.

There are several possible reasons for a discrepancy between water purchased and water sold. They are:

- Inaccuracy of master meter
- Inaccuracy of residential/commercial meters
- Leaks in the distribution system
- Water unaccounted for
- Water theft

Each possibility is addressed below.

Inaccuracy of Master Meter – As mentioned earlier, BJWSA calibrates the master meter annually. It should be accurate.

Inaccuracy of residential/commercial meters – The meters in use at HIU are three generations – 1980s, 1990s, and 2000s. In 2003, eleven meters were randomly selected from all three age groups. They were replaced and were sent to National Waterworks for accuracy testing. The accuracy of the meters averaged between 94% and 100% at a flow of two gallons per minute, which is the flow rate that normally occurs in most households. There was one meter that had virtually no accuracy, but that meter would have been identified and replaced as described below. A summary of that report is attached.

When conducting water meter readings and billings, BG is alerted to meters that show no usage during a month. That might not be unusual in the off-season, especially if there are no signs that the house is occupied. But, it would be unusual in the summer months or if there are indications that the house is occupied. A meter reader is sent to re-read those meters and to determine if the house is occupied. If the house is occupied and there should have been usage, the meter is checked with a simple five-gallon bucket and observation of the meter. If the meter is inaccurate, it is replaced.

Meter readers have been trained to listen and observe a meter when they are reading them. If a meter is not moving and the reader hears water flowing through it, he knows that the meter is defective and he reports it for replacement.

Meter Replacement

There are roughly three large 1½-inch meters and five 1-inch meters in use on the island. Because these meters are large, any inaccuracy is magnified. One 1½-inch meter already has been replaced and HIU has ordered two additional 1½-inch meters to complete the replacement process. Of the five 1-inch meters, three have been replaced, and replacement meters have been ordered for the other two 1-inch meters.

HIU plans to replace all residential meters beginning with the oldest meters. There are thirty-four (34) meters that were installed in September 1981, and these will be replaced

first. There are three (3) meters that were installed in 1982 and ninety-three (93) meters that were installed in 1983. The 1982 and 1983 meters will be replaced after the 1981 meters. The 1981-1983 meters represent 33% of all meters and are most likely to have inaccuracies. After the 1981-1983 meters have been replaced, HIU will evaluate the loss to determine if the replacement program has had a positive effect. If it has, the Company will continue replacing meters – oldest first – until no meter is more than five years old.

The company has not replaced aging meters in the past due to lack of available funds.

Leaks in the distribution system – Numerous leaks have been detected and repaired since the last rate case review. Landscapers cut curb stops, old lines blow out, galvanized metal disintegrates and leaks before breaking completely. A long-time major leak was found and repaired in the main 10-inch distribution line.

BG contacted a major leak detection company to determine if its services might identify significant leaks. The HIU situation is so small compared to large municipalities that the company has not returned telephone calls or emails.

In the Pelican Point subdivision, galvanized piping apparently was used at each home when that system was installed. There has been one blowout, which caused the 350,000-gallon tank to drain completely. Also, there have been several leaks and sinkholes in that area. When the leak is uncovered, there is a large cavern, which indicates that the leak had been occurring for some time. HIU plans to replace all Pelican Point pipe connections that have not been previously replaced to eliminate the galvanized material. This will be a large effort and will take a year or so to complete.

This work has not been performed previously due to a lack of available funds.

Unaccounted for water use – Blowoffs at the end of cul-de-sacs and fire hydrants are flushed on a regular schedule with no accounting for the lost water. Any water used by the fire department, whether in routine tests or used in actually fighting a fire, would not

be accounted for. Hydrant and blow-off flushing consumes approximately 25,000 gallons per year.

The new tertiary filters at the wastewater treatment plant use fresh water to backwash, and that occurs twice daily unless the system requires more frequent flushing. That water use currently is unmetered and amounts to at least 300,000 gallons per year. HIU plans to install a meter on that line in the near future to accurately account for the usage.

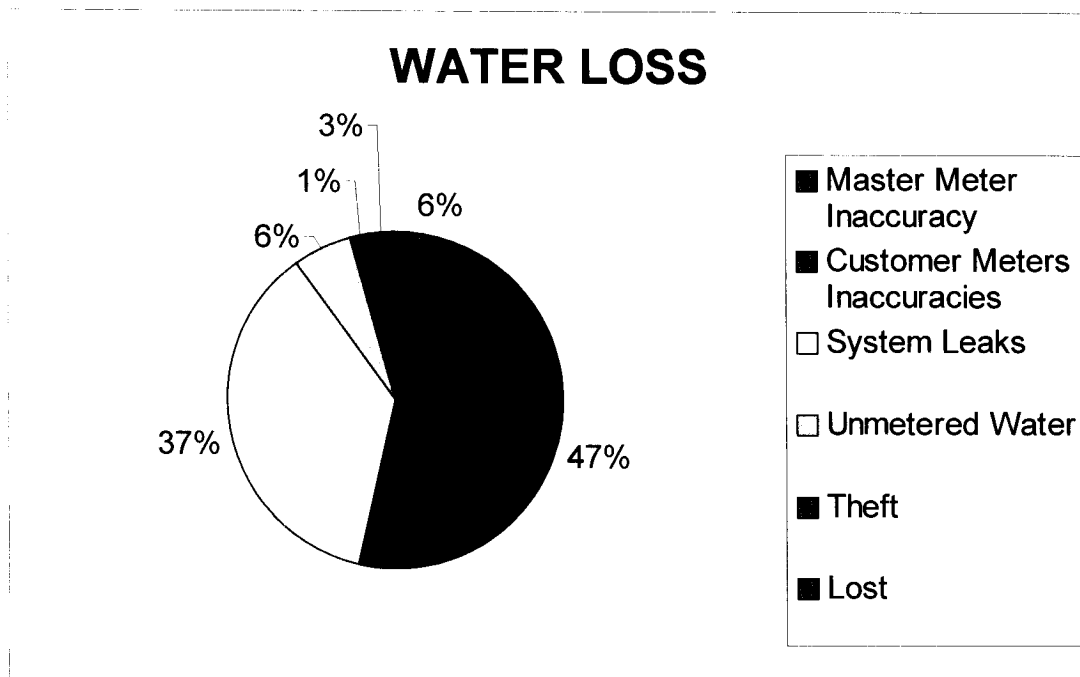
Water theft – Water theft has been a constant source of concern. Although relatively uncommon, this has occurred. When a thief is caught stealing water from HIU, he is required to pay for the estimated water use and the means of his theft is eliminated. It is difficult to know exactly when the thievery began or how much water was stolen.

SUMMARY

The estimated water "loss" broken down by category follows:

Total Water Purchased	40,300,000 gallons per year
Total Water Not Accounted For In Sales	6,800,000 gallons per year
Master Meter Inaccuracy	400,000 gallons per year
Inaccuracy of customers' meters	3,224,000 gallons per year
System Leaks	2,500,000 gallons per year
Unmetered Water	400,000 gallons per year
Theft	100,000 gallons per year
"Lost"	176,000 gallons per year

Note: The estimated leakage of 2,500,000 gallons per year equates to roughly five gallons per minute across the entire system.



(EXCERPT FROM NATIONAL WATERWORKS REPORT)

Meter Test Results For Harbor Island Utilities, Inc.

15 GPM Test	2 GPM Test	1/4 GPM Test	15 GPM Test	2 GPM Test	1/4 GPM Test
<u>% Accuracy</u>	<u>% Accuracy</u>	<u>% Accuracy</u>	<u>% Accuracy</u>	<u>% Accuracy</u>	<u>% Accuracy</u>
1 100%	100%	100%	1 100%	100%	100%
2 99%	101%	86%	2 99%	101%	86%
3 88%	98%	79%	3 88%	98%	79%
4 4%	0%	0%	4 100%	100%	98%
5 100%	100%	98%	5 98%	100%	84%
6 98%	100%	84%	6 98%	97%	81%
7 98%	97%	81%	7 99%	94%	81%
8 99%	94%	81%	8 98%	95%	58%
9 98%	95%	58%	9 100%	102%	98%
10 100%	102%	98%	10 78%	97%	48%
11 78%	97%	48%			
15 GPM 87.27%	2 GPM 89.45%	1/4 GPM 73.91%	15 GPM 95.65%	2 GPM 98.40%	1/4 GPM 81.30%
Average Accuracy = 83.55%			Average Accuracy = 91.78%		